

What is claimed is:

1. A method of manufacturing a battery including a positive electrode, a negative electrode and an electrolyte layer, comprising steps of:

attaching a terminal to one face of at least either the positive electrode or the negative electrode; and

forming the electrolyte layer on other regions excluding a region to which the terminal is attached to one face of either the positive electrode or the negative electrode.

2. A method of manufacturing a battery according to claim 1 comprises steps of intermittently forming an electrode mixture layer including electrode active material on an electrode collector in at least one electrode of either the belt-shaped positive electrode or the belt-shaped negative electrode;

attaching the terminal to an electrode collector exposed region where the electrode mixture layer is unformed; and

cutting the electrode collector between the electrode mixture layer, which is intermittently formed after the electrolyte layer is formed.

3. A method of manufacturing a battery according to claim 2 comprises a step of disposing a protection tape in a manner of covering a part of the terminal after the terminal is attached to the electrode collector exposed region.

4. A method of manufacturing a battery according to claim 2, wherein the electrode mixture layers are formed on both faces of the electrode collector, the electrode mixture layers are respectively formed on different

regions in the surface and the back of the electrode collector.

5. A method of manufacturing a battery according to claim 1, wherein the electrolyte layer is formed by pushing electrolyte with an electrolyte-delivering machine having a pressurization means.

6. A method of manufacturing a battery according to claim 5, wherein the electrolyte is delivered as being applied to heat for adjusting its viscosity.

7. A method of manufacturing a battery according to claim 5, wherein the electrolyte is delivered in a state where the electrolyte is applied to heat for adjusting its viscosity in the range of 0.001 Pa·s to 0.05 Pa·s.

8. A method of manufacturing a battery according to claim 5, wherein a belt-shaped electrode to which a terminal is attached, is conveyed, and the electrolyte is intermittently pushed to form the electrolyte layer on the belt-shaped electrode.

9. A method of manufacturing a battery according to claim 8, wherein when a region to which the terminal is attached is opposed to a delivering open of the electrolyte-delivering machine, the delivering open is located away from an electrode face.

10. A method of manufacturing a battery according to claim 8, wherein the electrolyte is intermittently delivered by opening and closing a shutter disposed in an electrolyte flowing path of the electrolyte-delivering machine.

11. A method of manufacturing a battery according to claim 8 comprises a step of rolling the electrode after the electrolyte is delivered

and dried, then the electrode face of the electrode on which the electrolyte layer is formed, is covered with a plastic film.

12. A method of manufacturing a battery according to claim 1, wherein electrolyte includes electrolyte salts and macromolecular compounds.

13. A method of manufacturing a battery according to claim 12, wherein the electrolyte further includes nonaqueous solvents.

14. A method of manufacturing a battery according to claim 12, wherein the electrolyte salts includes one kind material among a group of  $\text{LiPF}_6$ ,  $\text{LiAsF}_6$ ,  $\text{LiBF}_4$ ,  $\text{LiClO}_4$ ,  $\text{LiCF}_3\text{SO}_3$ ,  $\text{Li}(\text{CF}_3\text{SO}_2)_2\text{N}$  or  $\text{LiC}_4\text{F}_9\text{SO}_3$ .

15. A method of manufacturing a battery according to claim 12, wherein the macromolecular compounds includes at least one material among a group of polyvinylidene fluoride, polyacrylonitrile, acrylonitrile butadiene-rubber, acrylonitrile butadiene styrene resin, acrylonitrile polyethylene chloride propylene diene styrene resin, acrylonitrile vinyl chloride resin, acrylonitrile metaacrylate resin, acrylonitrile acrylate resin, polyethylene oxide, polyether denatured siloxane, copolymer made of polyvinylidene combined with other macromolecular compounds, copolymer made of polyacrylonitrile combined with other macromolecular compounds, copolymer made of polyethylene oxide combined with other macromolecular compounds.

16. A method of manufacturing a battery according to claim 13, wherein the nonaqueous solvents includes at least one material among a group of ethylene carbonate, propylene carbonate, butylene carbonate,  $\gamma$ -butyl lactone,  $\gamma$ -valerolactone, diethoxyethane, tetrahydrofuran,

2-methyltetrahydrofuran, 1,3-dioxolane, methyl acetate, methyl propionic acid, dimethyl carbonate, diethyl carbonate, ethylmethyl carbonate, 2,4-difluoroanisole, 2,6-difluoroanisole, 4-bromoveratrol.

17. A method of manufacturing a battery according to claim 1 wherein the positive electrode includes lithium mixed oxide shown in a general formula:  $\text{Li}_x\text{MO}_2$ , where  $x$  satisfies  $0.05 \leq x \leq 1.12$ , and  $M$  is more than one kind transition metal; and

the negative electrode includes at least one material among a group of materials capable of occluding and releasing lithium such as carbonaceous materials, silicon, silicon compounds, metal oxide, macromolecular materials.